WHAT IS CLAIMED IS:

1. A holographic recording method comprising:

simultaneously irradiating a signal light beam and a reference light beam onto an optical recording medium while an angle formed between the signal light beam and the reference light beam is set constant; and

recording information of the signal light beam in the optical recording medium as a plurality of pages of holograms, by changing a recording position while relatively shifting at least one of (A) the signal light beam and the reference light beam, and (B) the optical recording medium,

wherein page data is multiple-recorded for each predetermined unit.

2. A holographic recording method according to claim 1, wherein the page data in the predetermined unit is page data that constitutes one file.

3. A holographic recording method according to claim 2, wherein information is recorded in the optical recording medium, the information making the file correspond to a recording area, in which the file is recorded.

4. A holographic recording method according to claim 2, wherein the page data that represents head information is added to a front page of the file.

5. A holographic recording method according to claim 1,

wherein if the page data included in the one file is divided to a plurality of blocks and the plurality of blocks are recorded, the page data in the predetermined unit is page data that constitutes one block of the plurality of blocks.

6. A holographic recording method according to claim 5, wherein information is recorded in the optical recording medium, the information making the file correspond to a recording area, in which the file is recorded.

7. A holographic recording method according to claim 5, wherein page data that represents head information is added to a front page of the file.

8. A holographic recording method according to claim 5, wherein page data that represents information on a recording area in which the block to be read next is recorded, is added to an end of each block if the file is divided to a plurality of blocks and the plurality of blocks are recorded.

9. A holographic recording method according to claim 5, wherein if the file is divided to a plurality of blocks and the plurality of blocks are recorded, the file is reallocated so that the file is re-divided to a smaller number of blocks.

10. A holographic recording method according to claim 1, wherein a polarization direction of the signal light beam is set parallel to a polarization direction of the reference light beam.

11. A holographic recording method according to claim 1,

wherein a polarization direction of the signal light beam is set different from a polarization direction of the reference light beam.

12. A holographic recording method according to claim 1, wherein a polarization direction of the signal light beam is set orthogonal to a polarization direction of the reference light beam.

13. A holographic recording method according to claim 1, wherein the optical recording medium includes a photorefractive material.

14. A holographic recording method according to claim 1, wherein the optical recording medium includes a polarization sensitive material.

15. A holographic recording method according to claim 1, wherein the optical recording medium includes at least one type of polyester polymer.

16. A holographic recording method according to claim 15, wherein the at least one type of polymer includes an azobenzene structure in a side chain.

17. A holographic recording method comprising:

simultaneously irradiating a signal light beam and a reference light beam onto an optical recording medium; and

recording information of the signal light beam in the optical recording medium as a plurality of pages of holograms, by changing a recording angle while changing an angle formed

between the signal light beam and the reference light beam,

wherein page data is multiple-recorded for each predetermined unit.

18. A holographic recording method according to claim 17, wherein the page data in the predetermined unit is page data that constitutes one file.

19. A holographic recording method according to claim 18, wherein information is recorded in the optical recording medium, the information making the file correspond to a recording area, in which the file is recorded.

20. A holographic recording method according to claim 18, wherein the page data that represents head information is added to a front page of the file.

21. A holographic recording method according to claim 17, wherein if the page data included in the one file is divided to a plurality of blocks and the plurality of blocks are recorded, the page data in the predetermined unit is page data that constitutes one block of the plurality of blocks.

22. A holographic recording method according to claim 21, wherein information is recorded in the optical recording medium, the information making the file correspond to a recording area, in which the file is recorded.

23. A holographic recording method according to claim 21, wherein page data that represents head information is added to a front page of the file.

24. A holographic recording method according to claim 21, wherein page data that represents information on a recording area in which the block to be read next is recorded, is added to an end of each block if the file is divided to a plurality of blocks and the plurality of blocks are recorded.

25. A holographic recording method according to claim 21, wherein if the file is divided to a plurality of blocks and the plurality of blocks are recorded, the file is reallocated so that the file is re-divided to a smaller number of blocks.

26. A holographic recording method according to claim 17, wherein a polarization direction of the signal light beam is set parallel to a polarization direction of the reference light beam.

27. A holographic recording method according to claim 17, wherein a polarization direction of the signal light beam is set different from a polarization direction of the reference light beam.

28. A holographic recording method according to claim 17, wherein a polarization direction of the signal light beam is set orthogonal to a polarization direction of the reference light beam.

29. A holographic recording method according to claim 17, wherein the optical recording medium includes a photorefractive material.

30. A holographic recording method according to claim 17,

wherein the optical recording medium includes a polarization sensitive material.

31. A holographic recording method according to claim 17, wherein the optical recording medium includes at least one type of polyester polymer.

32. A holographic recording method according to claim 31, wherein the at least one type of polymer includes an azobenzene structure in a side chain.

33. A holographic recording method comprising:

simultaneously irradiating a signal light beam and a reference light beam onto an optical recording medium while changing a wavelength of the signal light beam and a wavelength of the reference light beam, with an angle formed between the signal light beam and the reference light beam being set constant; and

recording information of the signal light beam in the optical recording medium as a plurality of pages of holograms,

wherein page data is multiple-recorded for each predetermined unit.

34. A holographic recording method according to claim 33, wherein the page data in the predetermined unit is page data that constitutes one file.

35. A holographic recording method according to claim 34, wherein information is recorded in the optical recording medium, the information making the file correspond to a recording area,

in which the file is recorded.

36. A holographic recording method according to claim 34, wherein the page data that represents head information is added to a front page of the file.

37. A holographic recording method according to claim 33, wherein if the page data included in the one file is divided to a plurality of blocks and the plurality of blocks are recorded, the page data in the predetermined unit is page data that constitutes one block of the plurality of blocks.

38. A holographic recording method according to claim 37, wherein information is recorded in the optical recording medium, the information making the file correspond to a recording area, in which the file is recorded.

39. A holographic recording method according to claim 37, wherein page data that represents head information is added to a front page of the file.

40. A holographic recording method according to claim 37, wherein page data that represents information on a recording area in which the block to be read next is recorded, is added to an end of each block if the file is divided to a plurality of blocks and the plurality of blocks are recorded.

41. A holographic recording method according to claim 37, wherein if the file is divided to a plurality of blocks and the plurality of blocks are recorded, the file is reallocated so that the file is re-divided to a smaller number of blocks.

42. A holographic recording method according to claim 33, wherein a polarization direction of the signal light beam is set parallel to a polarization direction of the reference light beam.

43. A holographic recording method according to claim 33, wherein a polarization direction of the signal light beam is set different from a polarization direction of the reference light beam.

44. A holographic recording method according to claim 33, wherein a polarization direction of the signal light beam is set orthogonal to a polarization direction of the reference light beam.

45. A holographic recording method according to claim 33, wherein the optical recording medium includes a photorefractive material.

46. A holographic recording method according to claim 33, wherein the optical recording medium includes a polarization sensitive material.

47. A holographic recording method according to claim 33, wherein the optical recording medium includes at least one type of polyester polymer.

48. A holographic recording method according to claim 47, wherein the at least one type of polymer includes an azobenzene structure in a side chain.

49. A holographic recording method comprising:

simultaneously irradiating a signal light beam and a reference light beam onto an optical recording medium while changing a phase of the reference light beam, with an angle formed between the signal light beam and the reference light beam being set constant; and

recording information of the signal light beam in the optical recording medium as a plurality of pages of holograms,

wherein page data is multiple-recorded for each predetermined unit.

50. A holographic recording method according to claim 49, wherein the page data in the predetermined unit is page data that constitutes one file.

51. A holographic recording method according to claim 50, wherein information is recorded in the optical recording medium, the information making the file correspond to a recording area, in which the file is recorded.

52. A holographic recording method according to claim 50, wherein the page data that represents head information is added to a front page of the file.

53. A holographic recording method according to claim 49, wherein if the page data included in the one file is divided to a plurality of blocks and the plurality of blocks are recorded, the page data in the predetermined unit is page data that constitutes one block of the plurality of blocks.

54. A holographic recording method according to claim 53,

wherein information is recorded in the optical recording medium, the information making the file correspond to a recording area, in which the file is recorded.

55. A holographic recording method according to claim 53, wherein page data that represents head information is added to a front page of the file.

56. A holographic recording method according to claim 53, wherein page data that represents information on a recording area in which the block to be read next is recorded, is added to an end of each block if the file is divided to a plurality of blocks and the plurality of blocks are recorded.

57. A holographic recording method according to claim 53, wherein if the file is divided to a plurality of blocks and the plurality of blocks are recorded, the file is reallocated so that the file is re-divided to a smaller number of blocks.

58. A holographic recording method according to claim 49, wherein a polarization direction of the signal light beam is set parallel to a polarization direction of the reference light beam.

59. A holographic recording method according to claim 49, wherein a polarization direction of the signal light beam is set different from a polarization direction of the reference light beam.

60. A holographic recording method according to claim 49, wherein a polarization direction of the signal light beam is

set orthogonal to a polarization direction of the reference light beam.

61. A holographic recording method according to claim 49, wherein the optical recording medium includes a photorefractive material.

62. A holographic recording method according to claim 49, wherein the optical recording medium includes a polarization sensitive material.

63. A holographic recording method according to claim 49, wherein the optical recording medium includes at least one type of polyester polymer.

64. A holographic recording method according to claim 63, wherein the at least one type of polymer includes an azobenzene structure in a side chain.

65. A holographic recording apparatus for recording information of a signal light beam in an optical recording medium as a plurality of pages of holograms,

wherein a signal light beam and a reference light beam are simultaneously irradiated onto an optical recording medium while relatively shifting at least one of (A) the signal light beam and the reference light beam, and (B) the optical recording medium, with an angle formed between the signal light beam and the reference light beam being set constant, thereby changing a recording position, and

page data is multiple-recorded for each predetermined

unit.

66. A holographic recording apparatus according to claim 65, further comprising:

an analyzer that transmits a component, in a predetermined polarization direction, of a diffracted light beam from each of the pages of the holograms recorded in the optical recording medium; and

a detector that detects intensities of transmitted light beams that are transmitted through the analyzer.

67. A holographic recording apparatus for recording information of a signal light beam in an optical recording medium as a plurality of pages of holograms,

wherein a signal light beam and a reference light beam are simultaneously irradiated onto an optical recording medium, and a recording angle is changed while changing an angle formed between the signal light beam and the reference light beam, and

page data is multiple-recorded for each predetermined unit.

68. A holographic recording apparatus according to claim 67, further comprising:

an analyzer that transmits a component, in a predetermined polarization direction, of a diffracted light beam from each of the pages of the holograms recorded in the optical recording medium; and

a detector that detects intensities of transmitted light

beams that are transmitted through the analyzer.

69. A holographic recording apparatus for recording information of a signal light beam in an optical recording medium as a plurality of pages of holograms,

wherein a signal light beam and a reference light beam are simultaneously irradiated onto an optical recording medium while changing a wavelength of the signal light beam and a wavelength of the reference light beam, with an angle formed between the signal light beam and the reference light beam being set constant, and

page data is multiple-recorded for each predetermined unit.

70. A holographic recording apparatus according to claim 69, further comprising:

an analyzer that transmits a component, in a predetermined polarization direction, of a diffracted light beam from each of the pages of the holograms recorded in the optical recording medium; and

a detector that detects intensities of transmitted light beams that are transmitted through the analyzer.

71. A holographic recording apparatus for recording information of a signal light beam in an optical recording medium as a plurality of pages of holograms,

wherein a signal light beam and a reference light beam are simultaneously irradiated onto an optical recording medium

while changing a phase of the reference light beam, with an angle formed between the signal light beam and the reference light beam being set constant, and

page data is multiple-recorded for each predetermined unit.

72. A holographic recording apparatus according to claim 71, further comprising:

an analyzer that transmits a component, in a predetermined polarization direction, of a diffracted light beam from each of the pages of the holograms recorded in the optical recording medium; and

a detector that detects intensities of transmitted light beams that are transmitted through the analyzer.

73. A holographic recording apparatus comprising:

a light source for emitting a coherent light beam;

a stage that rotates or shifts an optical recording medium;

a light dividing and optical path changing unit that divides the coherent light beam to a light beam for a reference light beam and a light beam for a signal light beam, and that changes an optical path so that the reference light beam and the signal light beam are simultaneously irradiated onto the optical recording medium;

a spatial light modulator that is arranged in the optical path of the light beam for the signal light beam, that modulates

the light beam for the signal light beam in accordance with a supplied recording signal for each page, and that generates the signal light beam for recording said each page of a hologram; and

a signal supply unit that supplies the recording signal for said each page to the spatial light modulator so that page data is multiple-recorded for each predetermined unit.

74. A holographic recording apparatus according to claim 73, further comprising:

an analyzer that transmits a component, in a predetermined polarization direction, of a diffracted light beam from said each page of the hologram recorded in the optical recording medium; and

a detector that detects intensities of transmitted light beams that are transmitted through the analyzer.